

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Amend claims 3, 5, 25, 39, and 41 as follows.

Listing of Claims:

- 1 1. **(Previously amended)** A work-management method
2 comprising:
3 for a future point in time and each one of a plurality of
4 resources, determining a probability of availability of the one resource at
5 said future point in time;
6 combining the probabilities to obtain a number; and
7 using the number to schedule new tasks for the resources for
8 the future point in time.

- 1 2. **(Original)** The method of claim 1 wherein:
2 using comprises
3 scheduling for the future point in time no more than the number
4 of the new tasks to become available for servicing by the plurality of the
5 resources.

- 1 3. **(Currently amended)** The method of claim 42 wherein:
2 combining comprises
3 summing the probabilities to obtain the number.

- 1 4. **(Previously presented)** The method of claim 1 wherein:
2 determining comprises
3 for each of the resources, determining an amount of time t that
4 the resource has been servicing a task by now;

5 for each of the resources, determining a probability $F(t+h)$ of
6 the resource servicing its task to completion within a total amount of time
7 $t+h$, where h is an amount of time;
8 for each of the resources, determining a probability $F(t)$ of the
9 resource completing servicing its task by now; and
10 for each of the resources, determining a probability P that the
11 resource will complete servicing its task at the future point in time the
12 amount of time h from now as $\frac{F(t+h) - F(t)}{1 - F(t)}$.

1 **5. (Currently amended)** The method of claim ~~14~~ in a call
2 center wherein:
3 tasks comprise calls; and
4 scheduling using comprises
5 in response to P , determining whether or not to initiate or
6 cancel an outbound call.

1 **6. (Previously presented)** A work-management method
2 comprising:
3 determining an amount of time t that a resource has been
4 servicing a task by now;
5 determining a probability $F(t+h)$ of the resource servicing the
6 task to completion within a total amount of time $t+h$, where h is an amount
7 of time;
8 determining a probability $F(t)$ of the resource completing
9 servicing the task by now;
10 determining a probability P that the resource will complete
11 servicing the task within the amount of time h from now as $\frac{F(t+h) - F(t)}{1 - F(t)}$;
12 and
13 in response to P , scheduling another task for servicing.

1 7. **(Original)** The method of claim 6 wherein:
2 scheduling comprises
3 in response to P , determining whether or not to initiate said
4 another task.

1 8. **(Original)** The method of claim 6 in a call center wherein:
2 tasks comprise calls; and
3 scheduling comprises
4 in response to P , determining whether or not to initiate an
5 outbound call.

1 9. **(Original)** The method of claim 6 further comprising:
2 performing the determining steps for a plurality of resources,
3 and
4 determining a number of the resources that will likely have
5 completed servicing their respective tasks within the amount of time h
6 from now as a sum of the probabilities P determined for individual ones of
7 the plurality of resources; wherein
8 scheduling comprises
9 in response to determining the number of the resources,
10 scheduling new tasks for servicing.

1 10. **(Original)** The method of claim 9 wherein:
2 scheduling tasks for servicing comprises scheduling no more
3 than the number of the tasks for servicing.

1 11. **(Original)** The method of claim 6 wherein:
2 determining a probability $F(t+h)$ comprises
3 obtaining historical task-completion statistics, and

4 from the obtained statistics determining the probability $F(t+h)$;
5 and
6 determining a probability $F(t)$ comprises
7 from the obtained statistics determining the probability $F(t)$.

1 12. **(Original)** The method of claim 11 wherein:
2 obtaining historical task-completion statistics comprises
3 obtaining a mean and a variance of time historically spent by
4 resources on servicing tasks to completion.

1 13. **(Original)** The method of claim 6 wherein:
2 determining a probability $F(t+h)$ comprises
3 obtaining historical task-completion statistics,
4 fitting the task-completion statistics into a lifetime closed-form
5 cumulative-probability distribution to determine parameters of the
6 distribution, and
7 evaluating the distribution with the determined parameters and
8 the total amount of time $t+h$ to obtain $F(t+h)$; and
9 determining a probability $F(t)$ comprises
10 evaluating the distribution with the determined parameters and
11 the amount of time t to obtain $F(t)$.

1 14. **(Original)** The method of claim 13 wherein:
2 obtaining historical task-completion statistics comprises
3 obtaining a mean and a variance of time historically spent by
4 resources on servicing tasks to completion;
5 the cumulative-probability distribution F comprises a Weibull
6 distribution; and
7 the parameters comprise a dispersion parameter and a
8 parameter of central tendency.

1 15. **(Original)** The method of claim 6 wherein:
2 determining an amount of time t comprises
3 determining the amount of time t that the resource has been
4 servicing a task of one of a plurality of different types of tasks; and
5 determining historical task-completion statistics comprises
6 determining the historical task-completion statistics for the one
7 type of tasks.

1 16. **(Original)** The method of claim 6 wherein:
2 scheduling another task comprises
3 in response to P initiating preparation of a task that may require
4 servicing by an agent at a later time.

1 17. **(Original)** The method of claim 6 wherein:
2 determining a probability $F(t+h)$ comprises
3 obtaining a historical histogram for task completion, and
4 evaluating a cumulative said probability with the obtained
5 histogram for the total amount of time $t+h$ to obtain $F(t+h)$; and
6 determining a probability $F(t)$ comprises
7 evaluating the cumulative probability with the obtained
8 histogram for the amount of time t to obtain $F(t)$.

1 18. **(Original)** The method of claim 6 wherein:
2 scheduling comprises
3 in response to P , canceling preparation of a task that could
4 require servicing by a resource.

1 19. **(Previously canceled)**

1 **20. (Previously amended)** A computer-readable medium
2 containing instructions which, when executed in a computer, cause the
3 computer to perform the steps of:
4 for a future point in time and each one of a plurality of
5 resources, determining a probability of availability of the one resource at
6 said future point in time;
7 combining the probabilities to obtain a number; and
8 using the number to schedule new tasks for the resources for
9 the future point in time.

1 **21. (Previously amended)** A work-management apparatus
2 comprising:
3 means for determining, for a future point in time and each one
4 of a plurality of resources, a probability of availability of the one resource
5 at said future point in time;
6 means cooperative with the determining means for combining
7 the probabilities to obtain a number; and
8 means cooperative with the combining means for scheduling
9 for the future point in time no more than the number of new tasks for
10 servicing by the plurality of the resources.

1 **22. (Previously presented)** A work-management apparatus
2 comprising:
3 means for determining an amount of time t that a resource has
4 been servicing a task by now;
5 means cooperative with the time-determining means for
6 determining a probability $F(t+h)$ of the resource servicing the task to
7 completion within a total amount of time $t+h$, where h is an amount of time;
8 means cooperative with the time-determining means for
9 determining a probability $F(t)$ of the resource completing servicing the task
10 by now;

11 means cooperative with both of the probability-determining
12 means for determining a probability P that the resource will complete
13 servicing the task within the amount of time h from now as $\frac{F(t+h) - F(t)}{1 - F(t)}$;
14 and
means cooperative with the P -determining means and
responsive to P for scheduling another task for servicing.

1 23. **(Previously presented)** The apparatus of claim 21

2 wherein:

3 the means for combining comprise
4 means for summing the probabilities to obtain the number.

1 24. **(Previously presented)** The apparatus of claim 21

2 wherein:

3 the means for determining comprise
4 means for determining, for each of the resources, an amount of
5 time t that the resource has been servicing a task by now;
6 means for determining, for each of the resources, a probability
7 $F(t+h)$ of the resource servicing its task to completion within a total amount
8 of time $t+h$, where h is an amount of time;
9 means for determining, for each of the resources, a probability
10 $F(t)$ of the resource completing servicing its task by now; and
means for determining, for each of the resources, a probability
 P that the resource will complete servicing its task at the future point in
time the amount of time h from now as $\frac{F(t+h) - F(t)}{1 - F(t)}$.

1 25. **(Currently amended)** The apparatus of claim ~~24~~25 in a

2 call center wherein:

3 tasks comprise calls; and

4 the means for scheduling comprise
5 means responsive to P , for determining whether or not to
6 initiate or cancel an outbound call.

1 **26. (Previously presented)** The apparatus of claim 22
2 wherein:
3 the means for scheduling comprise
4 means responsive to P , for determining whether or not to
5 initiate said another task.

1 **27. (Previously presented)** The apparatus of claim 22 in a
2 call center wherein:
3 tasks comprise calls; and
4 the means for scheduling comprise
5 means responsive to P , for determining whether or not to
6 initiate an outbound call.

1 **28. (Previously presented)** The apparatus of claim 22
2 wherein:
3 the means for determining an amount of time t comprise
4 means for determining the amount of time t for each of a
5 plurality of resources;
6 the means for determining a probability $F(t+h)$ comprise
7 means for determining the probability $F(t+h)$ for each of the
8 plurality of resources;
9 the means for determining a probability $F(t)$ comprise
10 means for determining the probability $F(t)$ for each of the
11 plurality of resources, and
12 means for determining a number of the plurality of resources
13 that will likely have completed servicing their respective tasks within the

14 amount of time h from now as a sum of the probabilities P determined for
15 individual ones of the plurality of resources; and
16 the means for scheduling comprise
17 means responsive to determining the number of the resources,
18 for scheduling new tasks for servicing.

1 29. **(Previously presented)** The apparatus of claim 28
2 wherein:
3 the means for scheduling comprise
4 means for scheduling no more than the number of the tasks for
5 servicing.

1 30. **(Previously presented)** The apparatus of claim 22
2 wherein:
3 the means for determining a probability $F(t+h)$ comprise
4 means for obtaining historical task-completion statistics, and
5 means for determining the probability $F(t+h)$ from the obtained
6 statistics; and
7 the means for determining a probability $F(t)$ comprise
8 means for determining the probability $F(t)$ from the obtained
9 statistics.

1 31. **(Previously presented)** The apparatus of claim 30
2 wherein:
3 the means for obtaining historical task-completion statistics
4 comprise
5 means for obtaining a mean and a variance of time historically
6 spent by resources on servicing tasks to completion.

1 32. **(Previously presented)** The apparatus of claim 22
2 wherein:

3 the means for determining a probability $F(t+h)$ comprise
4 means for obtaining historical task-completion statistics,
5 means for fitting the task-completion statistics into a lifetime
6 closed-form cumulative-probability distribution to determine parameters of
7 the distribution, and
8 means for evaluating the distribution with the determined
9 parameters and the total amount of time $t+h$ to obtain $F(t+h)$; and
10 the means for determining a probability $F(t)$ comprise
11 means for evaluating the distribution with the determined
12 parameters and the amount of time t to obtain $F(t)$.

1 **33. (Previously presented)** The apparatus of claim 32
2 wherein:
3 the means for obtaining historical task-completion statistics
4 comprise
5 means for obtaining a mean and a variance of time historically
6 spent by resources on servicing tasks to completion;
7 the cumulative-probability distribution F comprises a Weibull
8 distribution; and
9 the parameters comprise a dispersion parameter and a
10 parameter of central tendency.

1 **34. (Previously presented)** The apparatus of claim 22
2 wherein:
3 the means for determining an amount of time t comprise
4 means for determining the amount of time t that the resource
5 has been servicing a task of one of a plurality of different types of tasks;
6 and
7 the means for determining historical task-completion statistics
8 comprise

9 means for determining the historical task-completion statistics
10 for the one type of tasks.

1 35. **(Previously presented)** The apparatus of claim 22
2 wherein:
3 the means for scheduling another task comprise
4 means responsive to P for initiating preparation of a task that
5 may require servicing by an agent at a later time.

1 36. **(Previously presented)** The apparatus of claim 22
2 wherein:
3 the means for determining a probability $F(t+h)$ comprise
4 means for obtaining a historical histogram for task completion,
5 and
6 means for evaluating a cumulative said probability with the
7 obtained histogram for the total amount of time $t+h$ to obtain $F(t+h)$; and
8 the means for determining a probability $F(t)$ comprise
9 means for evaluating the cumulative probability with the
10 obtained histogram for the amount of time t to obtain $F(t)$.

1 37. **(Previously presented)** The apparatus of claim 22
2 wherein:
3 the means for scheduling comprise
4 means responsive to P , for canceling preparation of a task that
5 could require servicing by a resource.

1 38. **(Previously presented)** The medium of claim 20 wherein:
2 using comprises
3 scheduling for the future point in time no more than the number
4 of the new tasks to become available for servicing by the plurality of the
5 resources.

1 39. **(Currently amended)** The medium of claim 2038 wherein:
2 combining comprises
3 summing the probabilities to obtain the number.

1 40. **(Previously presented)** The medium of claim 20 wherein:
2 determining comprises
3 for each of the resources, determining an amount of time t that
4 the resource has been servicing a task by now;
5 for each of the resources, determining a probability $F(t+h)$ of
6 the resource servicing its task to completion within a total amount of time
7 $t+h$, where h is an amount of time;
8 for each of the resources, determining a probability $F(t)$ of the
9 resource completing servicing its task by now; and
10 for each of the resources, determining a probability P that the
11 resource will complete servicing its task at the future point in time the
12 amount of time h from now as $\frac{F(t+h) - F(t)}{1 - F(t)}$.

1 41. **(Currently amended)** The method of claim 2040 for a call
2 center wherein:
3 tasks comprise calls; and
4 scheduling using comprises
5 in response to P , determining whether or not to initiate or
6 cancel an outbound call.

1 42. **(Previously presented)** A computer-readable medium
2 containing instructions which, when executed in a computer, cause the
3 computer to perform the steps of:
4 determining an amount of time t that a resource has been
5 servicing a task by now;

6 determining a probability $F(t+h)$ of the resource servicing the
7 task to completion within a total amount of time $t+h$, where h is an amount
8 of time;
9 determining a probability $F(t)$ of the resource completing
10 servicing the task by now;
11 determining a probability P that the resource will complete
12 servicing the task within the amount of time h from now as $\frac{F(t+h) - F(t)}{1 - F(t)}$;
13 and
14 in response to P , scheduling another task for servicing.

1 **43. (Previously presented)** The method of claim 42 wherein:
2 scheduling comprises
3 in response to P , determining whether or not to initiate said
4 another task.

1 **44. (Previously presented)** The medium of claim 42 for a call
2 center wherein:
3 tasks comprise calls; and
4 scheduling comprises
5 in response to P , determining whether or not to initiate an
6 outbound call.

1 **45. (Previously presented)** The medium of claim 42 further
2 comprising instructions which, when executed in the computer, cause the
3 computer to perform the steps of:
4 performing the determining steps for a plurality of resources,
5 and
6 determining a number of the resources that will likely have
7 completed servicing their respective tasks within the amount of time h

8 from now as a sum of the probabilities P determined for individual ones of
9 the plurality of resources; wherein
10 scheduling comprises
11 in response to determining the number of the resources,
12 scheduling new tasks for servicing.

1 46. **(Previously presented)** The medium of claim 45 wherein:
2 scheduling tasks for servicing comprises scheduling no more
3 than the number of the tasks for servicing.

1 47. **(Previously presented)** The medium of claim 42 wherein:
2 determining a probability $F(t+h)$ comprises
3 obtaining historical task-completion statistics, and
4 from the obtained statistics determining the probability $F(t+h)$;
5 and
6 determining a probability $F(t)$ comprises
7 from the obtained statistics determining the probability $F(t)$.

1 48. **(Previously presented)** The medium of claim 47 wherein:
2 obtaining historical task-completion statistics comprises
3 obtaining a mean and a variance of time historically spent by
4 resources on servicing tasks to completion.

1 49. **(Previously presented)** The medium of claim 42 wherein:
2 determining a probability $F(t+h)$ comprises
3 obtaining historical task-completion statistics,
4 fitting the task-completion statistics into a lifetime closed-form
5 cumulative-probability distribution to determine parameters of the
6 distribution, and
7 evaluating the distribution with the determined parameters and
8 the total amount of time $t+h$ to obtain $F(t+h)$; and

9 determining a probability $F(t)$ comprises
10 evaluating the distribution with the determined parameters and
11 the amount of time t to obtain $F(t)$.

1 **50. (Previously presented)** The medium of claim 49 wherein:
2 obtaining historical task-completion statistics comprises
3 obtaining a mean and a variance of time historically spent by
4 resources on servicing tasks to completion;
5 the cumulative-probability distribution F comprises a Weibull
6 distribution; and
7 the parameters comprise a dispersion parameter and a
8 parameter of central tendency.

1 **51. (Previously presented)** The method of claim 42 wherein:
2 determining an amount of time t comprises
3 determining the amount of time t that the resource has been
4 servicing a task of one of a plurality of different types of tasks; and
5 determining historical task-completion statistics comprises
6 determining the historical task-completion statistics for the one
7 type of tasks.

1 **52. (Previously presented)** The medium of claim 42 wherein:
2 scheduling another task comprises
3 in response to P initiating preparation of a task that may require
4 servicing by an agent at a later time.

1 **53. (Previously presented)** The medium of claim 42 wherein:
2 determining a probability $F(t+h)$ comprises
3 obtaining a historical histogram for task completion, and
4 evaluating a cumulative said probability with the obtained
5 histogram for the total amount of time $t+h$ to obtain $F(t+h)$; and

6 determining a probability $F(t)$ comprises
7 evaluating the cumulative probability with the obtained
8 histogram for the amount of time t to obtain $F(t)$.

1 **54. (Previously presented)** The medium of claim 42 wherein:
2 scheduling comprises
in response to P , canceling preparation of a task that could require
servicing by a resource.